

Demos-Tech: A Tool for Public Engagement

The unprecedented wave of new technologies making its way to our economies could underpin new sustainable models of economic activity, through managed or modulated disruptions that avoid turning the public against them. However, the pace of innovation is creating new tools and techniques well ahead of the creation of guiding norms and policy, in fact ahead of any public awareness about them. Absent an ex-ante, thoroughly examined, deliberate path for the introduction of commercialized technology, the consequences to the public good and to natural resources are confronted ex-post, often in cases where the damage is large enough and cannot be ignored, and the public feels deceived.

A compelling example of the importance of public perceptions and opinions in the context of the sustainable development goals (SDGs) is the lack of action on carbon emissions. The strongest obstacle to the introduction of a carbon tax is public perception and acceptance, as was recently tested experimentally by president Macron of France. A diligent and open discussion with the public could be the decisive step that provides a solution to the problem, clarifying the options the public views favorably(1). The simplest and more forthcoming of the new technologies that will cause disruptions in the very near future may be autonomous vehicles (AV), which are a mere step away. Their introduction should observe that “If commonsense protections are not in place to govern AV development, and problems occur, the public will reject AVs, and the opportunity this new technology presents to improve public safety will be lost(2)”. This is a simple but very powerful argument, which should be applied and extended to innovation and technology in general.

As we are creating more powerful technologies with less intuitive consequences, when unchecked these may aggregate in problems that the public will vehemently reject. A public who feels cheated and used through the adoption of technologies will react just as “postmodern” critics of science articulate their case, in terms of power, status-quo, relativism, alternative truths. Indeed, the increased importance of engaging the public in decisions about the impact of science and technology on society have been recognized for quite some time by academics. The National Academies of the US have recommended that policy should be “a democratic action aiming at an optimal tradeoff between of a number of different agendas and viewpoints; scientists cannot rule that discussion. The problem is on the policy-making side; we need to figure out how to better integrate science into the political process(3).” In the case of new genetic editing techniques, the National Academy of the USA recommends the implementation of safety and ethical regulations as the best strategy to avoid the loss of public trust, and thus preserve the potential of the technology to benefit humanity(3). The outline proposed by the Royal Society under the concept of “intelligent openness”(4) provides a road map for the changes needed to make Science and Technology more open towards leveraging the involvement of an informed public.

In “The Moral Machine experiment(5)”, citizens across the world were presented with a “serious game” in which they had to express preferences to moral dilemmas created by unavoidable accidents caused by AVs. The deployment of AVs is unquestioned and taken as a given, with uniform attributes across the world. The study represents a milestone in public engagement to express moral choices in problems that arise at the interface between society and new technologies. However, in the future citizens should be able to express moral choices or preferences ex-ante, before a new technology has been deployed. As a result, citizen should be able to choose attributes and parameters that would modulate and constrain technologies within boundaries underpin by different value systems. In the case of AVs it is clearly very different to deploy them in the state of Arizona in the US, in the countries that span the Arabian peninsula and Arab United Emirates, the city of Kyoto, Japan, the small Italian cities with medieval city plans, Paris in France, other European cities, and so on.

Building on these early examples, the Digital and Information revolution could provide new means of public engagement and participation in new technologies. A well informed and educated public could facilitate the adoption of new technologies with key roles in sustainable development goals. Yet, it is important to note that with digital information we are in a new, uncharted era. Since the invention of the printing press until the end of the 20th century, the bulk of the information regarding important national and international events had conformed to de-facto standards and revisions, and subjected to editorial reviews by a competitive establishment, for good and bad. Information was also subjected to national laws. We can argue that today Information and Communication Technologies constitute a common. While it may appear that the digital technology realm lacks the attribute of subtractability that define traditional commons, for instance knowledge appears to be non-subtractable, in practice the misuses or dishonest uses of the resource effectively subtract wealth from the commons. The wealth of accurate, objective information available in the internet community is diminished by dishonest practices. Thus, the effective wealth of knowledge is diminished by selfish, norm-free, predatory behavior. The same is true of science and novel technologies, since the effective consequences of excessively greedy or predatory behavior is a subtraction from the unbiased potential of the knowledge.

References

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